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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,764	06/22/2000	Roy Martin	1519.016	2537

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EXAMINER
ANTHONY, JOSEPH DAVID

ART UNIT	PAPER NUMBER
1714	13

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Please find below and/or attached an Office communication concerning this application or proceeding.

mk-13

Office Action Summary	Application No. 09/603,764	Applicant(s)	
	Examiner	Group Art Unit 1714	

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 10/15/02 As Request For Rce & Amendment B.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 17-57 is/are pending in the application.

Of the above claim(s) 20-39, 48 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 17-19, 40-45, 46-47, 49-57 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)–(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)–(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO–1449, Paper No(s). _____

☒ Notice of Reference(s) Cited, PTO–892

☐ Notice of Draftsperson's Patent Drawing Review, PTO–948

☐ Interview Summary, PTO–413

☐ Notice of Informal Patent Application, PTO–152

☐ Other _____

Office Action Summary

DETAILED ACTION

1. This application contains claims directed to a plurality of patentably distinct species of the claimed invention in regards to the oxidizer component.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species of the oxidizer component for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Peter C. Lando on 11/18/02 a provisional election was made with traverse to prosecute the invention of wherein the oxidizer component was hydrogen peroxide, claims 17-19, 40-47, and 49-57 read on the elected hydrogen peroxide species. Affirmation of this election must be made by applicant in replying to this Office action. Claims 20-39 and 48 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 44 is indefinite because a corrosion inhibitor has already been added the method, namely the anionic oxidizer.

Claim Rejections - 35 USC § 102 & 103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 46-47, 49, 52, 54, and 56-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Derule et al. U.S. Patent Number 5,814,247.

Derule et al teaches aqueous solutions for the cold working corrosion protection treatment of steel sheet. The solutions contain a water soluble salt of heptanoic acid, and oxidizing agent, such as sodium perborate, and preferably a wetting agent and pH adjusting agents. When the solution is applied to steel sheets it forms a protective passivating layer on the steel sheets, see the

abstract, column 4, lines 7-18, and column 5, lines 6-16. Applicant's claims are deemed to be anticipated over Examples 2-4.

7-9, 12-14

8. Claims 17-19, 40-44 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derule et al. U.S. Patent Number 5,814,247.

Derule et al has been described above. Derule et al "differs" from applicant's claimed invention in that said Examples 2-4 do not seem to expressively disclose flushing the oxidizer from the surface of the metal after the metal has been passivated. It would have been obvious to one having ordinary skill in the art to perform such a flushing step in light of Derul et al's disclosure as a whole, see column 2, line 8 to column 3, line 2. Note that Derule et al. discloses treating steel sheets with the disclosed passivating composition wherein these steel sheets are manufactured into welded pipes. A flushing step would thus be at once envisaged by one having ordinary skill in the art in such a process.

10 - 11

9. Claims 45, 50-51, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derule et al. U.S. Patent Number 5,814,247 in view of anyone one of the following: Freese et al. U.S. Patent Number 5,575,920 or Chen et al. U.S. Patent Number 4,913,822 or Kesslet et al. U.S. Patent Number 5,866,013.

Derule et al has been described above. Derule et al further differs from applicant's claimed invention in that there is no direct disclosure to the addition of a deposit control agent, a chelating agent or a sequestering agent.

Freese et al., Chen et al., and Kessler et al individual disclose compositions and methods of inhibiting scale formation and corrosion of metal surfaces. The individual references are full of teachings to the use of scale inhibitors, anti-corrosion compounds such as sequestering and chelating agents, see their abstracts as well as column 4, lines 6-30 of Freese et al., and column 5, lines 9-26 of Kessler et al..

It would have been obvious to one having ordinary skill in the art to use the disclosure of anyone of the secondary references as motivation to add a deposit control agent, a chelating agent or a sequestering agent to the solution disclosed by Derule et al for the benefits that such additional compounds are disclosed to have by the secondary references.

10. Claims 17-18, 40-44, 46, 49, 54-55, and 57 are rejected under 35 U.S.C. 102(e) as being anticipated by Goudiakas et al. U.S. Patent Number 6,120,619.

Goudiakas et al teaches passivation of stainless steel in an aqueous organosulphonic acid medium that contains at least one oxidizing agent, such as persulfate, see the abstract. The method of passivation comprises applying the above solution to the surface of the stainless steel and then after passivation flushing or rinsing the solution from the treated stainless steel, see

column 3, lines 20-59. Applicant's claims are deemed to be anticipated over the examples especially Example 5.

11. Claims 19 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goudiakas et al. U.S. Patent Number 6,120,619.

Goudiakas et al has been described above. Goudiakas et al differ from applicant's claimed invention in that there is no direct teaching (i.e. by way of an example) to where a hydrogen peroxide donor is actually used as the oxidizer source.

It would have been obvious to one having ordinary skill in the art to use the broad disclosure of the patent as motivation to actually use a hydrogen peroxide donor source since such as source is directly disclosed by the patent, see the abstract, and column 2, lines 51-67.

12. Claims 45, 50-53 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goudiakas et al. U.S. Patent Number 6,120,619 in view of anyone one of the following: Freese et al. U.S. Patent Number 5,575,920 or Chen et al. U.S. Patent Number 4,913,822 or Kesslet et al. U.S. Patent Number 5,866,013 or (Derule et al. U.S. Patent Number 5,814,247 for claim 52 only).

Goudiakas et al has been described above. Goudiakas et al differ from applicant's claimed invention in that there is no direct disclosure to the addition of a deposit control agent, a chelating agent or a sequestering agent and a dispersing agent.

Freese et al., Chen et al., and Kessler et al individual disclose compositions and methods of inhibiting scale formation and corrosion of metal surfaces. The individual references are full of teachings to the use of scale inhibitors, anti-corrosion compounds such as sequestering and chelating agents, and dispersing agent, see their abstracts as well as column 4, lines 6-30 of Freese et al., and column 5, lines 9-26 of Kessler et al..

It would have been obvious to one having ordinary skill in the art to use the disclosure of anyone of the secondary references as motivation to add a deposit control agent, a chelating agent, a sequestering agent or a dispersing agent to the solution disclosed by Goudiakas et al for the benefits that such additional compounds are disclosed to have by the secondary references.

Applicant's claim 52 is further deemed to be very obvious in light of Derule et al. U.S. Patent Number 5,814,247 which clearly teaches that dispersing agents are well in the art to be used in passivation process of metal surfaces using oxidizers, see column 5, lines 56-16. As such to add such dispersing agents to Goudiakas et al process is deemed to be very obvious.

13. Claims 46 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 504 621 A1 .

EP teaches a system for the passivation of metal surfaces affected by operating conditions and agents promoting corrosion. The process comprises applying to the metal surface a composition comprising gaseous oxygen, either as air or pure oxygen in combination with a secondary oxidizer which is preferably a peroxide source, such as hydrogen peroxide or organic

peroxides, see abstract, page 2, lines 26-51, and page 3, lines 26-31. Applicant's claims are deemed to be anticipated over the examples.

7-9, 13-14

14. Claims 17-19, 44, 47 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 504 621 A1.

EP has been described above. EP differs from applicant's claimed invention in the following ways: 1) the examples do not seem to expressively disclose flushing the oxidizer from the surface of the metal after the metal has been passivated, 2), the examples do no use a peroxoacid as a mild oxidizer hydrogen peroxide donor, and 3) the examples do not expressively have a measuring step of the corrosion rate or the surface of the metal.

It would have been obvious to one having ordinary skill in the art to perform such a flushing step in light of EP's disclosure as a whole. Furthermore, the use of a hydrogen peroxide source as the secondary oxidizer source would have been obvious since such sources are expressively disclosed by the reference. Finally to measure the corrosion rate is deemed to be obvious over the reference and is in any case notoriously well known to those having ordinary skill in the art.

12

15. Claims 52 and 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 504 621 A1 in view of Derule et al. U.S. Patent Number 5,814,247.

EP differs from applicant's claimed invention in that there is no direct disclosure to adding a dispersing agent, adjusting the pH of the passivating composition and added a non-oxidizing inhibitor to the passivating composition.

It would have been obvious to one having ordinary skill in the art to use the disclosure of Derule to adding a dispersing agent, adjusting the composition ph and adding a non-oxidizing inhibitor to oxidant containing passivating composition as the motivation to add such components the compositions used by EP for the benefits disclosed by Derule et al..

10-11

16. Claims 50-51 and 53 rejected under 35 U.S.C. 103(a) as being unpatentable over EP 504 621 A1 in view of anyone one of the following: Freese et al. U.S. Patent Number 5,575,920 or Chen et al. U.S. Patent Number 4,913,822 or Kesslet et al. U.S. Patent Number 5,866,013.

EP has been described above. EP differs from applicant's claimed invention in that there is no direct disclosure to the addition of a deposit control agent, a chelating agent or a sequestering agent and a dispersing agent.

Freese et al., Chen et al., and Kessler et al individual disclose compositions and methods of inhibiting scale formation and corrosion of metal surfaces. The individual references are full of teachings to the use of scale inhibitors, anti-corrosion compounds such as sequestering and chelating agents, and dispersing agent, see their abstracts as well as column 4, lines 6-30 of Freese et al., and column 5, lines 9-26 of Kessler et al..

It would have been obvious to one having ordinary skill in the art to use the disclosure of anyone of the secondary references as motivation to add a deposit control agent, a chelating agent, a sequestering agent or a dispersing agent to the composition disclosed by EP for the benefits that such additional compounds are disclosed to have by the secondary references.

17. Claims 46-47, 49 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 89/08728.

WO teaches a process for treating metallic surfaces for protection again corrosive liquids. The process comprises contacting the metal surface with a solution containing a peroxide source, such as hydrogen peroxide, to form a protective oxide layer on the metal surface. The peroxide solution may also contain stabilizers for the peroxide, see the abstract, claims and Example 2. Applicant's claims are deemed to be anticipated over the examples, such as Example 2.

7-9, 13-14

18. Claims 17-19, 40-44, and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 89/08728.

WO has been described above. WO differs from applicant's claimed invention in the following ways: 1) the examples do not seem to expressively disclose flushing the oxidizer from the surface of the metal after the metal has been passivated, 2) there is no direct teaching (i.e. by way of an example) to where chelating agents or sequestering agents are added to the peroxide

containing solution, and 3) the examples do not expressively have a measuring step of the corrosion rate or the surface of the metal.

It would have been obvious to one having ordinary skill in the art to perform such a flushing step in light of WO's disclosure as a whole. Furthermore, the addition of sequestering or chelating agents to the oxidizer solution would have been obvious since such additives are suggested by the reference, see Example 2. Finally to measure the corrosion rate is deemed to be obvious over the reference and is in any case notoriously well known to those having ordinary skill in the art.

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19. Claims 52 and 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 89/08728 in view of Derule et al. U.S. Patent Number 5,814,247.

WO differs from applicant's claimed invention in that there is no direct disclosure to adding a dispersing agent, adjusting the pH of the passivating composition and added a non-oxidizing inhibitor to the passivating composition.

It would have been obvious to one having ordinary skill in the art to use the disclosure of Derule to adding a dispersing agent, adjusting the composition ph and adding a non-oxidizing inhibitor to oxidant containing passivating composition as the motivation to add such components the compositions used by WO for the benefits disclosed by Derule et al..

10-11

20. Claims 45 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 89/08728 in view of anyone one of the following: Freese et al. U.S. Patent Number 5,575,920 or Chen et al. U.S. Patent Number 4,913,822 or Kesslet et al. U.S. Patent Number 5,866,013.

EP has been described above. EP differs from applicant's claimed invention in that there is no direct disclosure to the addition of a deposit control agent.

Freese et al., Chen et al., and Kessler et al individual disclose compositions and methods of inhibiting scale formation and corrosion of metal surfaces. The individual references are full of teachings to the use of scale inhibitors, anti-corrosion compounds such as sequestering and chelating agents, and dispersing agent, see their abstracts as well as column 4, lines 6-30 of Freese et al., and column 5, lines 9-26 of Kessler et al..

It would have been obvious to one having ordinary skill in the art to use the disclosure of anyone of the secondary references as motivation to add a deposit control agent to the composition disclosed by WO for the benefits that such additional compounds are disclosed to have by the secondary references.

Prior-Art Cited But Not Applied

21. Any prior-art reference which is cited on FORM PTO-892 but not applied, is cited only to show the general state of the prior-art at the time of applicant's invention.

Examiner Information

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (703) 308-0446. This examiner can normally be reached on Monday through Thursday from 7:35 a.m. to 6:00 p.m. in the eastern time zone. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The group **(non-after final)** FAX machine number is (703) 872-9310. The group **(after final)** FAX machine number is (703) 872-9311. Unofficial correspondence transmitted by FAX must be marked "DRAFT". All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0651. The receptionist is located on the 8th floor of Crystal Plaza 3 (e.g. CP-3) and will be the welcome point for all visitors to the building.

Joseph D. Anthony
Primary Patent Examiner
Art Unit 1714

11/26/02